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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,965

07/25/2003

Rudolf J. Hofmeister

15436.215

3965

7590

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EXAMINER

PAYNE, DAVID C

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/626,965	Applicant(s) HOFMEISTER ET AL.	
	Examiner David C. Payne	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 27-36 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8, 9, 20, 21, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claim an 'RT'. However, a careful reading of the specification yields no explanation of this term.

Allowable Subject Matter

3. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 12, 23, 29, 31, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai et al. US 5,557,437 (Sakai).

Re claims 1, 12, 23, 29, 31, 33, Sakai disclosed

In accordance with the present invention, there is provided an optical terminal system having self-monitoring function, comprising: a receiving device including an

optical/electric convertor for receiving an optical signal and converting the optical signal into an electric signal, a S/P convertor for converting the electric signal converted by the optical/electric convertor into a parallel electric signal, and a signal state detector for checking if the parallel electric signal is normal, then separating a low-level signal from the parallel electric signal and outputting the low-level signal; a transmitting device including a signal generator for switching a clock for the low-level electric signal and multiplexing the low-level electric signal into a high-level signal, a P/S convertor for converting the electric signal generated by the signal generator into a serial electric signal, and an electric/optical convertor for converting the serial electric signal into an optical signal and transmitting the optical signal; a system clock generator for generating a system clock which actuates the receiving device and transmitting device; a monitoring controller for controlling the receiving device and transmitting device and monitoring an alarm; a power source for supplying power to the receiving device, transmitting device, system clock generator and monitoring controller; a high-level group loopback section for connecting the P/S convertor of the transmitting device and the S/P convertor of the receiving device to internally loop back the serial electric signal; a low-level group loopback section for connecting the signal generator of the transmitting device and the signal state detector of the receiving device to internally loop back the parallel electric signal; a selfloopback section for connecting the signal state detector of the receiving device and the signal generator of the transmitting device to directly loop back the electric signal received by the receiving device to the transmitting device; and a self-

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monitoring controller for performing a self-monitoring test on the respective components of the receiving device and transmitting device by. using the self-loopback section and either of the high-level group loopback section and low-level group loopback section, for example, Col. 1/Line 50-67, Col. 2/Line 1-24.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-7, 10, 11, 13-19, 22, 24, 25, 28, 30, 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. US 5,557,437 (Sakai) in view of Kato et al. US 2002/0021468 A1 (Kato).

Re claims 2, 3, 4, 15, 16, and 25, Sakai disclosed the aforementioned invention but does not disclose an integrated circuit with a post amplifier and laser driver. Kato discloses in

FIG. 2 is a block diagram showing the structure of a transceiver IC for optical communication as an embodiment of a semiconductor integrated circuit according to the invention. Referring to FIG. 2, there is shown a transceiver IC 100, which is a semiconductor integrated circuit having both receiving circuit unit 110 and transmitting circuit unit 120 implemented in a single semiconductor substrate (semiconductor chip). The receiving circuit unit 110 has a signal reception process circuit 130, which converts a multiplex electrical input signal (serial signal) fed from

an input port t.sub.11 into electrical output (serial) signals on the respective channels, and sends them to an output port t.sub.12. The transmitting circuit unit 120 has a signal transmission process circuit 150, by which the electrical signals (serial signals) fed on a plurality of channels from an input port t.sub.21 are multiplexed in a time sharing manner to be a multiplex fast electrical output (serial) signal, and sent to an output port t.sub.22. At the output ends of the receiving circuit unit 110 and transmitting circuit unit 120, there are respectively provided output buffer circuits 140 and 143 that convert the output signals into signals of desired amplitude levels. At the input ends thereof, there are respectively provided input buffer circuits 141 and 142 that amplify the input signals into signals of desired levels and shape the waves of the signals., e.g. paragraph 38, Fig 3. It would have been obvious to include these elements and integrate them since integration of components yields smaller, faster communications.

Re claims, 5, 6, 7, 10, 11, 13, 14, 17, 18, 19, 22, 24, 28, 30, 32, 34, and 35 the modified combination of Sakai and Kato disclosed clock and data recovery units which the applicant terms eye openers, see for example, Kato Figure 2.


Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7:00a - 4:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dcp


David C. Payne
Primary Examiner
AU 2613